PK-12 Math Pathways
CTXMAT Math Summit 2019
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PK-12 Data Breakout Session Agenda

• Today you will:
  • Use regional and district data to work through data activities in small groups
  • Leave with a plan of the actions you will take over the next 30, 60, and 90 days

• Agenda Overview
  • Explore High School Data
  • Affinity Protocol Activity
  • Explore Middle School Data
  • Process Map Activity
  • 30-60-90 Day Planning Time
Today we will Explore Math Pathways for a Recent High School Cohort

Central Texas, 2017-2018 High School Senior Cohort

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center

- First-time 9th graders in 2014-2015
- Seniors in 2017-2018
- Enrolled all 4 years, but did not necessarily graduate
College Aligned Math Course Completion Varies Greatly by Race, Income and Gender
Central Texas, 2017-2018 High School Senior Cohort

Source: E3 Alliance analysis of PEIMS data at the UT Austin Education Research Center
What Math do Students Take During Senior Year?
Central Texas, 2017-2018 High School Senior Cohort

Senior Year Math Course Completion
2017-2018 High School Senior Cohort (N=19,240)

- College Prep Math/ AQR/Statistics, 19%
- AP/IB/Dual Credit, 27%
- PreCalc, 21%
- Algebra 2, 9%
- Before Algebra 2, 4%
- No Math, 15%
- Other Math, 5%

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
Gaps in Middle School Algebra 1 Completion look Similar to Gaps in College Aligned Math in High School

Central Texas, 2017-2018

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center

% of Students Completing Algebra 1 by 8th grade

- Non-Low Income: 45%
- Low Income: 24%
- 20 percentage point gap in middle school...

% of Students Completing AP/IB/DC Math in HS

- Non-Low Income: 40%
- Low Income: 16%
- Is still a ~25 percentage point gap by the end of high school
3/4 of Highest Achieving Hispanic Students Were in Algebra I by 8th Grade

Percentage of Central Texas Students Enrolled in Algebra 1 by 8th Grade by Quintile on 2015 5th Grade STAAR Math

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
3/4 of Highest Scoring Low Income 5th Graders Were in Algebra I by 8th Grade

Percentage of Central Texas Students Enrolled in Algebra 1 by 8th Grade by Quintile on 2015 5th Grade STAAR Math

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
Rates of Algebra 1 Completion by 8th Grade have Improved Over Time, but Gaps Remain

Source: E3 Alliance analysis of PEIMS data at the UT Austin Education Research Center
# 30-60-90 Plan Instructions

**Goal:** (EXAMPLE: Create more equitable student representation in math by 8th grade)

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>EXAMPLE: (Ensure placement of every 5th grade student in top 2 quintiles on state math assessment into accelerated math pathway in 6th grade with option to &quot;opt out&quot;)</th>
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<tbody>
<tr>
<td>Objective 2</td>
<td>EXAMPLE: (Summer Bridge Program)</td>
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<td>Objective 3</td>
<td>EXAMPLE: (Professional Development)</td>
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<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Action Items</th>
<th>Participants</th>
<th>Resources</th>
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<tbody>
<tr>
<td>Next Week</td>
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<td>30 Days</td>
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Thank you!

data.e3alliance.org